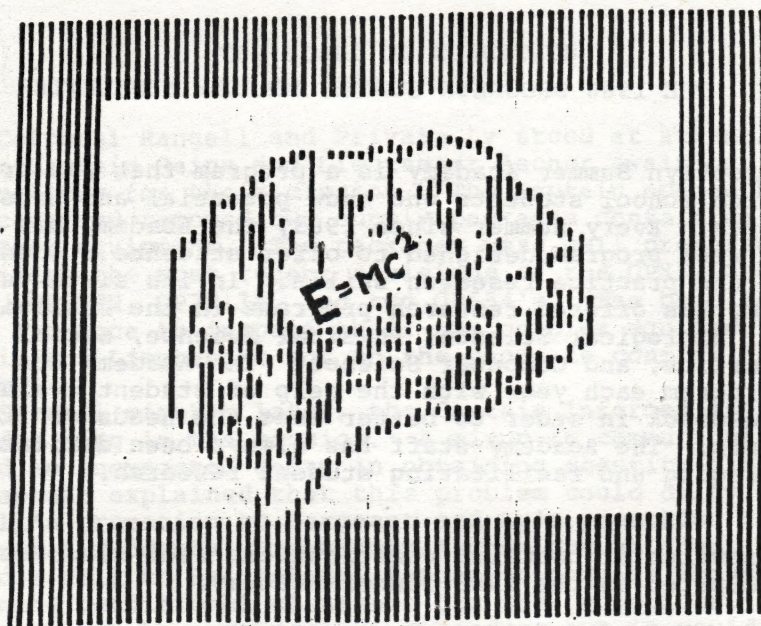


MATHEMATICS

SCIENCE



COMPUTER

SOCIAL SCIENCE

1988



**BROOKLYN MATHEMATICS
AND SCIENCE ACADEMY**

RESEARCH

THE 1988 BROOKLYN SUMMER ACADEMY NEWSLETTER

The Brooklyn Summer Academy is a program that was created for high school students who show potential and interest for research. Every summer since 1983, the Academy has offered a six week program designed to offer students a chance to learn and practice research skills. In its sixth year, the Academy has offered research programs in the following areas: Biological Science, Physical Science, Social Science, Mathematics, and Computer Science. The Academy has improved its program each year with the help of student evaluation and feedback in order to better meet the needs of its students. The Academy staff has always been dedicated to encouraging and facilitating student research.

This newsletter contains contributions from students who participated in the 1988 Summer Academy.

Special thanks to Superintendent Joyce Coppin for making the Academy possible. Best wishes to Saul Reine in his new position at Plainview. Best of luck to the staff and congratulations to all the students who completed the Academy this year.

Eric Rangell and Quocdan Ly
Newsletter Editors

1988 ACADEMY STAFF

Saul Reine	Academy Director/Biology Specialist
Alan Ascher	Assistant Director/Biology Specialist
Marty Langan	Physical Science Specialist
Carl Gussin	Social Science Specialist
David Hankin	Mathematics Specialist
Ed Farr	Computer Science Specialist
Paulette Palmer	Lab Specialist
Eric Rangell	Educational Assistant
Quocdan Ly	Student Aide

THE BOARD OF EDUCATION
by Eric Rangell

Corporal Rangell and Private Ly stood at attention before Captain Reine and Lieutenant Ascher awaiting instructions for their mission. The Captain opened his briefcase and removed two supply packages containing the necessary equipment. The packages were well prepared, containing the most recent revisions of the OP85, OP551, OP444, OP550R, DP2013A, and two OP654's. The boys were given a chance to inspect their new complex equipment as the Captain and Lieutenant got on the phone to confirm their orders.

Several minutes later, the Captain informed the boys of a sudden snag in the mission. A mixup in communication had caused an unexpected delay in obtaining security clearance. The Captain explained that this problem could delay Rangell's promotion to Sergeant and Ly's promotion to Corporal. Suddenly, Lieutenant Ascher got an idea. He placed a call to Lt. Colonel Lathan to inquire about obtaining conditional clearance for the promotions. It turned out to be a roundabout procedure but it would do the trick. The Captain sent a dispatch to Major Holder requesting conditional clearance for Ly and Rangell.

However, Rangell and Ly could not have expected to get through the procedure without a hitch. Both were informed that no further action could be taken until General Aquilone approved their clearance. In order to get the General's approval, they would need a letter from their Captain with the official stamp of approval of Colonel Coppin. Only then would conditional clearance be forwarded to Major Breslof who would authorize the promotions.

Exactly one month passed before the boys received any word on their clearance. They grew anxious as time passed because there was a possibility that they would not be cleared until after their seven week mission had terminated. But the Captain received the word in the fourth week and instructed the boys to complete the procedure.

Rangell and Ly reported to Major Breslof at the 503rd division. They expected no problems now that everything was supposedly in order. But it wasn't that easy. The clearance from General Aquilone had been lost and their files had been misplaced. Horrified, they called their Captain. They were reassured that the mess could be straightened out if they obtained a copy of the letter of conditional clearance from Lieutenant McCoy.

With the letter in their hands, their problems magically disappeared. The misplaced files were located and all the paperwork was completed. They were all done... except for one minor obstacle. They could not be compensated for the work they had done during the month before clearance was received. But with a few more letters and phone calls and the signature of the Colonel this problem is about to be resolved.

Meanwhile, Rangell and Ly remain hard at work on their mission of assisting new recruits with their rigorous training. They are indebted to their Captain and Lieutenant, not only for continuous support in guiding them through a maze of obstacles, but also for their warmth and friendship, which is a result of their willingness to give more than expected and a genuine commitment to their mission.

THE BROOKLYN SCIENCE AND MATH ACADEMY.

On July 5th 1988, I entered the Brooklyn Science and Math Academy. It was very interesting and exciting. Approximately 80 attending students participated in the courses given at the Academy. There were five classes given in biology, math, physics, social science and computer science. Everyone had an opportunity to choose their major subject. In addition to the major there were different skills that we learned. My major was social science and three other skills I learned were:

1. Computer operation
2. The usage of computers when doing research papers.
3. Various statistical skills.

The Academy didn't only involve things pertaining to school, but other things such as trips and movies. On July 29th, the entire Academy went on a trip to Riis Park. The idea of the trip was for everyone to socialize and have fun. We played softball, rode bicycles, and a group of us went on a nature walk. Everything was paid for by the Academy, including food and transportation. Over the six week period that the courses lasted, different major groups attended other trips. The social science group attended a trip to Flushing Queens. The idea of the trip was that we experience and observe people from different cultures. On that particular trip I learned and observed the cultures of some of the people that live there, such as the Indians, the Chinese and the Koreans. We also visited an Indian temple, to observe the way they worship their Gods and the structure of their religion. The last part of the trip was the Indian restaurant. There we experienced a different type of food. Every thing about our trip was great.

We also watched movies pertaining to problem solving. The movies had a great impact on us. Three things I learned were: the importance of time management when solving problems, what it takes to be a problem-solver, and the crucial need for persistence, perseverance and patience.

The Academy is a very interesting, exciting, and educational program designed for high school students. I thank the directors, teachers, students and parents for their full support and for making a great contribution towards the success of this great program. I hope that the other students benefited as much as I did from the entire program.

Nadine Daniel
Social Science Major

TO WHOM IT MAY CONCERN THIS POEM IS FOR YOU.
THE TITLE IS MISSING TO KEEP YOU GUESSING.
YOU CAN GIVE IT WHATEVER NAME YOU DESIRE IT IS FINE WITH ME.

When we met, the day you know...
We both were strangers.
We knew nothing of each other
But as time passed by,
We became the best of friends
Our goals, and dreams have come to
Face under this cave.
Soon it would be time for us
To separate, I will leave you
Heart-broken.
Ho ! How we wish time could stop
So that we could be...always
Forever together.

This summer I had the opportunity to go to the Summer Academy at South Shore High school. It was a worthwhile experience. The director and the staff were cordial to each and every one of us. We had the opportunity to choose the major that suited us. And the teachers were at our rescue whenever we needed help. They work with us patiently so that we could understand the lessons. There came a time in the middle of the semester when I was so frustrated and felt lost that I stopped coming to the Academy. But after thinking it over I decided that I would write the director a letter explaining my decision. I did write the letter and handed in to the director. After we talked I went to my classroom.

I thank the director of the academy for allowing me to continue. I also thank Mr. Farr for his help.

Guy Bonny
Computer Major

It is nice. I can't find a word to express it.

I met many new friends in the Academy. Unfortunately, there are not many girls. Although there are only 8 students in my Math class, however, it makes it possible for the teacher to take care every single aspect.

We learned many useful formulas which are not included in the text book that we used in regular school. The formulas became very interesting under the nice explanation of the teacher. The teacher always persuades us to think deeply about any problems that we meet. We must be creative in order to do a good project.

The teachers in the Academy set up many trips for us. Unfortunately, I can't participate in most of them since I have a job.

During this summer, we not only sat down and learned Math. We learned to be active, to ask questions. And I also learned how to speak proper English.

Okay! It is time to say good bye.

(Dennis) Yeuk Chow Cho,
Mathematic Major
F.D.R HS

While in the Academy, I encountered many new friends, and exciting people (Can I lie or what?). Many people who I would not talk to in the past became good friends of mine now.

The Academy didn't only teach us about Math and Science, it also taught us how to help each other (with our projects). Even the first day, the Academy tried teaching this to us, with the five square puzzle. The students found out, without communication, the puzzle was impossible to solve for some people (but for the Mathematics Major, It was as easy as $A^2+B^2=C^2$).

That's it, so good-bye and hope to see you in the future (Just kidding! Ha!Ha!).

Christopher Chung
Mathematics Major (what else!)

My name is YaFen He.

I am from John Dewey and I am majoring in math.

The Summer Academy is a real nice program, we do things that are different from the regular summer schools. In my math class, I learned how to be a problem explorer instead of just being a problem solver. I worked on different challenging math problems, then I changed the problem and created myself another new math problem. So instead of following what the teacher is doing, I created my own thoughts. I also learned many different problem solving techniques in the class.

Since we worked as a group in the Summer Academy, I got a opportunity to communicate with students from different schools, we made friends with each other. I really have a nice time in the Academy and I am glad I came here.

Hi! my name is Rita Yun.
My home school is James Madison H.S.
In the Summer Academy my major area is math.

At the begining, I thought it was a boring program. But later I found out that it was really a nice program. Especially the field trips were real fun. Normally we had a trip once a week. I liked the trips because I never went to those places before. The Summer Academy gave me a chance to go there. I had a chance to go to different libraries. First, we went to Brooklyn College Library, then Mid Manhattan library, Polytechnic University library, etc. In the last field trip, we went to the Hall of Science. That was really very interesting. I had a very nice summer and I'm happy at the Summer Academy.

THE HALL OF SCIENCE

I am a student at BUSHWICK H.S. I am participating in the Summer Academy of 1988 at SOUTH SHORE H.S. I had a good experience during this summer. I did a lot of exciting experiments in this Summer Academy. There were many trips we made. All of them were interesting. I am writing about the most interesting trip that I had.

When our teacher announced that we are going to the HALL OF SCIENCE, I was very pleased with that announcement. We were also told that we are going to experiment with lasers, mirrors and other scientific inventions. I was very excited to have that particular trip than all of the other trips. In that museum really I enjoyed everything. There was a painting of a fancy looking lady and we had to find out an old woman from that painting. At first I couldn't really figure it out, but when my friend and a guide in the museum helped me to make it out I was able to see an old witch. The other thing I liked was an image of a spring but we didn't know that it was an image. "TOUCH THE SPRING" it was written there and then when we tried to touch the spring there wasn't anything but just the image. There were mirrors that cast funny images of ourselves and made us laugh. There was an interesting dissection of cow's eye with the help of lasers. I enjoyed it because I am a science student. There was a screen against the wall, it took pictures of those people who stood against it. A blue color light came and took the picture and after few seconds a yellow light came and erased it.

I wondered about all of those things. I think we should thank God, that he gave us a brain and taught us how to use it. Those were the inventions of "Human Mind", which made other human minds wonder.

MOBY DICK

The scare of a lifetime was about to be unleashed upon my person. The place where it was to take place was the 'NEW YORK AQUARIUM'. The way it began was all very simple. The Summer Academy staff had planned a trip to the aquarium where all we were going to do was to go behind the scenes and witness how the marine life was taken care of. However no one bothered to tell me that we were also going to observe a "TANK FULL OF MAN-EATING SHARKS!!!!" I found this out when it was too late. The first thing I knew was that I was seeing two very harmless beluga whales, then the next thing I realized was that I was standing on a very narrow, unstable, and life-threatening ledge over a tank of SHARKS!! In the beginning I was on the point of fainting, however the fear sort of left me when I saw the magnificence that these aquatic creatures possessed. They swam with such grace and authority. They were truly a sight to look at. I personally could have stayed there observing them forever, however at one point one of the sharks suddenly jumped up and nearly gave everyone a tremendous heart-attack. Then to my regret it was time to depart from the tank of one of our most misunderstood prehistoric creatures of our time. This experience was one that I would remember for the rest of my life. And it all would have not been possible if it weren't for the Summer Academy.

IRINA SUAREZ

PHYSICAL SCIENCE

The Conductor

An elite group was chosen to make a trip to Philadelphia. The name of the group was the physical science group and our destination was to the Franklin Institute. The trip was a long one but the accommodations were quite good. At the museum the past was brought to life. The foundation of all our other inventions were operational at the museum. However the one exhibit which caught my eye were the locomotives. These magnificent vehicles were the most powerful ever built by man. As I boarded one of these vehicles I started to think about the early conductor. I envisioned him as one of America's pioneers who travelled this great country in a way many of us have forgotten. As I left the train I felt privileged that I was able to ride on a part of America's past.

ANDY BERNSTEIN

Danielle Glemaud
Summer Academy

The Summer Academy is a program at South Shore H.S. for students who want to enhance their knowledge of science research. You can choose from biology, physics, computer, or social science. All the teachers are experienced and fun to have. The Summer Academy also gives you three credits towards your diploma for completing the research you have done over the summer.

I chose physical science because it seems interesting and also in my senior year I may be taking physics so I just want to get a head start. Ever since I was 9 years old I was interested in science. In the future I plan to be a pediatrician. I've had this career in my mind since I was in the third grade. I hope to be successful in the future, so that is why every chance I have to enhance myself I go for it.

My experience at the academy so far has been great. We have gone to the Brooklyn College Library and the New York Aquarium. I have learned so many new and interesting things these first two weeks I am looking forward to the weeks ahead. I learned a lot about animals in the aquarium and about the aquarium itself, about circuits, electricity, voltage, resistors, current, etc..., and different techniques on how to go about researching on a topic. I also worked a lot on the computer, learning about word processing and how the computer can help me research.

Brooklyn Math and Science Academy Newsletter

I have learned many things in the Summer Academy this year that will surely benefit me for the rest of my life. I have learned how to do proper research and it helped me with my report on Word Processors. My major is computer and I have learned a great deal about computers. My project for the summer was to find out why most people prefer Computers more than Typewriters and my answer is the because computers are better than typewriters. Then I compared them to see which is better by writing down all the things a computer can do that a typewriter can't and then I compared Word Star to Apple Works to see which is better if you want to buy one. The Word Star is better and most people prefer to buy it. Besides the educational things, we went on many trip and I had a wonderful time.

I've met many people and made many friends during my summer here, some of whom I'll continue being friends with after the program is over. I'll admit there have been boring times at the Academy, but the good times made up for it. I would like to thank the staff for a wonderful summer. Thank You very much for a great summer.

The Summer Academy at South Shore high school this year of 1988 has been a fantastic and rewarding experience. It sounds dull to attend school during the summer vacation, but you know something? participating in this Summer Academy was just great. I have learned so much (including how to do a not so perfect research journal). I also had a chance to work with the computer which I never had before. I have met many people and made new friends. The trips were fabulous, including the one to Cold Spring Harbor Laboratories where we worked with DNA. Also the trip to Jamaica Bay was fascinating, I had never been sailing before, or in a boat so close to the sea water, where one could just relax and admire the view.

I want to thank with all my heart my instructors Mr. Reine and Mr. Ascher for trying hard to make us better animals, I mean better individuals. I would love to come back next summer.

Thank you.

Mavel Hernandez
James Madison H.S
Biology Major

My Summer Academy Experience

My experience at the summer academy was a really a great one. I had more fun than I expected. I liked the experience of meeting new people, and doing new things, I also liked it because you didn't have people breathing down your neck to do work, you were allowed to work at your own pace. I think under these circumstances a person can be more productive. I wish that all people could get to work under such conditions. I also thought that we got a lot of hands on experience unlike at school where supplies are limited, so the teacher usually calls the class around for you to watch them do it. If I had the chance to do what I did this summer over I would.

Zenovia Young

EXCELLENCE

I would like to start off by saying that I enjoyed working with the heads of the Summer Academy and my fellow classmates. Since being in this country, this is one of the two best programs that have satisfied my thirst for more knowledge and excellence. I appreciate many of the new things that i have been taught, and that I have learnt. I never knew anyone at the program when I came, but they made me feel at home. Previous to coming to this program, my love was for science and mathematics because of my excellence in these subjects and other subjects too. This program has proven to me that there is a place where I can extend my talents. I hope to come back here next year to advance my talents.

My name is Warren Mak, from John Dewey High School. My major is biology.

This summer program was very educational. I have learned many important techniques that will help me in the future. I have learned in a personal and professional level. It was a honor to be in the BROOKLYN MATHAMATICS and SCIENCE ACADEMY and I'm hoping that I'll see you next summer. THE SUMMER OF 89'

TO ALL MY FRIENDS, GOOD LUCK AND TAKE CARE!!!!

remember always,
WARREN MAK
SUMMER OF '88

Shermon Peters
Mathematics and Science Academy

Bushwick High School
8/11/88

Newsletter

We're almost nearing the end of the 1988 Mathematics and Science Academy and I am sure that I'll miss it very much because of the new friends I made while here.

I think the time I spent here was well worth it. I learned a lot about researching, doing complex experiments, using equipment that were both complicated and new to me and going places that I might not have normally gone to if I weren't attending the Academy.

I also liked some of the teachers here because of their sense of humor and their ability to teach a class without making it boring and depressing. I especially liked the sense of humor of Mr. Saul Reine and the teaching of Mr. Alan Ascher. Their indepth lessons on researching will definitely help with research projects in the future. Thank you. I hope to be back here next summer.

I KNEW SOME PEOPLE AT THE ACADEMY

BY: YU PING CHEN
MAJOR: PHYSICAL SCIENCE
JOHN DEWEY HS

I knew many kinds of people before I went to the Academy. Since I went to the Academy, I have known more friends in my life. Most people gave me a deep and special impression even though we just have been together for one and half months.

My major is not Social Science so I didn't make an investigation of anybody. But we knew each other after the first conversation. I found out something that is very interesting at the end of the Academy and it also surprised me in the beginning. I found out that a lot of the students are from other countries. Some of them just have been here for several months. But everybody speaks English very well, but not me. They told me some "secrets" about their grades. They got the grades so high on the Regents that I didn't believe them. Of course, the high grade sometimes could mean that person is smart.

I will share with you my honest comment about my experience at Downstate Medical Center. My Mentor, Dr. Jorgensen, has been very cooperative with me. We were able to clone DNA in plasmid vectors. The six weeks of training at a modern laboratory will benefit me when I go to college. I have used such equipment like the spectrophotometer and running an acrylamide gel on electrophoresis. It is exciting working with a mentor this summer. The Dialog service has been helpful for me to obtain the necessary information to learn more about my experiment. The Academy has fulfilled my experiences at Downstate and I would attend the program if it were offered during the Fall. I will compete in the Science fair because of this program. The experience as a mentored student this summer, I would rate myself very good.

AZIZ AHMAD
SUMMER ACADEMY STUDENT

To be talking about the Summer Academy experience, it should be a privilege. I spent most of the summer in the Academy to work with teachers and students from other schools. In the summer, the Academy was a tiring but very beneficial experience. To wake up bright and early in the morning was a great feeling. It was an experience of a lifetime, and I am honored. At first, it was a bother waking up in the morning, but at the end of the Academy I wish it would continue on. It was great doing a research project, because it was an achievement for me. The Summer Academy is a great Experience, and there's no doubt about it!!!!

Finally, the time is here. The academy is once again closing its doors for the summer. My immediate feelings were, "Yes, thank god its finally over. Convicts don't have it this bad". But looking back things were not so bad. Yes, there were those mornings when I would splash water on my face and say to myself "why? Why are you doing this to yourself? Your friends are all having a good time while you go to school. They get up at 12:00 noon while your buzzer sounds at 6:29 A.M. Your friends party hardy until 4:00 A.M. while you go beddy-bye at 12:59 A.M." Yes there were those mornings when I just did not feel like coming to school, I felt like quitting. But I hung through and I made it. I think that this academy was not only fun but educational as well. I learned new and better ways of doing things I had been doing for most of my life. I also learned about things I had never heard about before. But I am still glad its over.

"ZAID AHMAD" HAS SPOKEN
MORE WORDS ARE NOT NEEDED

YOLANDA MARTINS
BUSHWICK HIGH SCHOOL

MAJOR: SOCIAL SCIENCE
TEACHER: DR. CARL GUSSIN

ENTERING A NEW WORLD

Rated as the world's third largest religion, Hinduism has over 500 million followers. Although Hinduism is practiced in many other countries, it has a very special relationship with India. Hinduism's most magnificent temples are in India, but this summer I had the opportunity to visit one which was located at 45-47 Bowne St., Flushing.

On the 3rd of August, 1988, Dr. Gussin, ten other Social Science students, and I set out to learn about a new world we knew little or nothing about.

We were going to visit a Hindu temple in Queens. As we started walking towards the temple I noticed an old woman. She was in her mid-fifties. She was wearing a sari, which is a traditional woman's dress. She had red powder in the parting of her hair, which meant she was married. She also had a red dot in the middle of her forehead, which later I found out was only decorative. She also wore a nose ring on the left side of her nose and on her feet she wore a pair of brown leather sandals.

When we finally got to the temple, the first thing that caught my eyes were the little gods that were carefully carved and placed at the upper front of the temple. Before entering we all had to take our shoes off. As we got inside I could see many different gods, who wore chains made of fresh flowers. There were also offerings of fruits and water placed at their feet. We were told by the priests that there are 3 main gods who had the power of changing into many other gods. Some of these gods are Parvati, Ganesh, Indra, Lakshmi, Durga, Hanuman, etc. Although these gods have no meaning in our personal lives, they are extremely important to the Hindu people.

After leaving the temple we went to an Indian restaurant where we were introduced to many exotic dishes which are usually cooked in different parts of India.

That day will always remain as one of the most significant days of my life because I learned about my grandmother's ancestors who were from many different parts of India. Like her they all grew up as Hindus. Although I don't get very involved in her beliefs of reincarnation and her culture, I find it extremely interesting and important to learn about other people's lifestyles, religions, and culture. So, maybe by knowing a little more about their culture and interests we would be able to have a better relationship and maybe make the world a better place to live in. So go ahead, learn about a different culture, today!

The Summer Academy

I learned many things in the Summer Academy this year that will surely benefit me for the rest of my life. I learned how to do a proper research paper for social science involving interviews and unobtrusive research. I've even learned how to see if my information is scientifically significant or not by doing the chi square and the T test.

Besides the educational things, we went on many trips and have seen many places. Among those are: the Hall of Science, an Indian Buddhist temple, the Brooklyn College library, the sailing trip at Floyd Bennett Field, a tour of the historical sights in Canarsie, the trip to Riis Beach.

In the small group we have for social science, we've had many good times together with Dr. Gussin. The seven girls in our group have been like a little family outside of school. We all were willing to help each other with the problems we had with our projects and we were willing to console each other when we felt frustrated. I think the most important thing we did as a group was to analyze "nerds". I know this sounds funny, and we thought so at first, too, but after the two interviews we did, we all had a totally different perspective of a nerd. I learned that they are as much regular people as we are, but what makes them seem different to others is that they are weak people emotionally and are vulnerable to abuse. They are also extreme intellectuals. What makes them vulnerable besides their intellect is the fact that when they are bothered by someone, they don't stand up for themselves. This entire topic is someone's project and her goal is to find out what makes "nerds" vulnerable and not able to stand up for themselves and to see what could be done about it. Another part of the project, which someone else might do, is to interview the teachers to see how they cope with "nerds", how the nerds act in class and to maybe figure out what can be done by teachers to help them. As a group we thought this topic was very enriching to us and I feel that from what we heard during the interview, we learned a little bit about ourselves.

I've met many people and made many friends during my summer here- some of whom I'll continue being friends with after the program is over. I'll admit there have been boring times at the academy, but the good times made up for it all.

Ann Murray
Social Science

Dwight D'Aguilar
August 16, 1988

Computer: Major
Mr. Farr: Teacher

I find that a lot of students in the Summer Academy who are intelligent wait till the last minute to write their assignments. This is believed to be a very unwise thing to do, but who am I to say anything? It is the last day, the time is 2:45 and I have just finished this newsletter article.

Rosa Diaz
8/9/88

Social Science
Dr. Gussin

This Summer has been one of the best of my life , as I joined the South Shore Math and Science Summer Academy Program . Within this program I had a chance of meeting and socializing with students of different ethnic backgrounds from mine. At the same time I got a chance to be with students of my own age and same interest that of mine. I was overjoyed when I first set foot into the South Shore building . I was amazed when I saw a well cared for school. The way it was maintained said it all. I was thrilled to see a school much more clean and beautiful than my dirty school.

I remember the first person I spoked to in the Academy, his name was Ricardo Black, a Biology Major. He then went on to introducing me to other students of the program. The only thing I disliked about the program is the fact that we (different majors) seem to stick or just plainly keep to our selves. We never have time to speak to one another, except on rare occacions . Other than having to attend the program for five days in a row I have no other complaints.

My own Social science teacher is pretty much an outgoing man- he keeps us going throughout the days with his countless stories and smart funny remarks. He knows when to joke and when to stop, which is totally out of this world . I never in my life had a teacher quite like him. So far I've enjoyed my summer at the Academy and I have realized that this experience among the others of my earlier years I'll never forget.

Michelle Hodge
Social Science

The program this summer has been a great learning experience for me. Not only have I become an independant researcher by doing everyday classwork, but also by participating in the many activities.

At the beginning of the summer I had many questions about the program, but as the summer stretched on my many questions began receiving answers. When in doubt about my subject area, the instructors gave me an opportunity to choose my special area of interest. This was very helpful for me because I knew that whatever I chose would be enjoyable.

MY EXPERIENCE IN THE SUMMER ACADEMY

I feel that the Summer Academy program is educational and entertaining.

One feature of the Summer Academy that I like the most is the field trips. The trip to the Franklin Institute was a remarkable experience. From that trip I had learn and experience a lot of things in physics, math and communication. One of the exciting thing I experienced was the transmission of information by using fiber optics and laser. Some other wonderful things I saw were the hypercube (a model of a four dimensional cube) and the model that represents the curvature of space-time. This model shows you how does the curvature of space-time creat the so called gravitational phenomenon. I liked this trip.

One other thing I learned from the Summer Academy is electronics. My teacher Mr. Langan with great patience, taught us the basic components of a circuit and helped us to build the amplifier.

I think that everything in the Summer Academy is good. But I suggest that you should set up a higher standard for admission to the Summer Academy.

VINCENT WU
8-16-88

NAME: Dahlia Charles
MAJOR: Physical Science

DATE: August 17, 1988
Teacher: Mr. Langan

MY EXPERIENCES AT THE SUMMER ACADEMY

I joined the Brooklyn Summer Academy to enhance my knowledge in physical science and learn new experiences from the instructors. We learned how to do research at the Brooklyn College Library so we could look up the materials we would need to develop our projects.

The instructors took us on many excursions to learn about the different fields of study at the different institutions. The places were a great learning experience and very educational.

In order to gain credits for the summer, all the students had to develop their own projects and research papers in their field of study. My project is a common cathode LED display counter. It was complicated at first to construct but it later proved to be a worthwhile project with the aid of Mr. Langan, my physics teacher.

My summer at the academy was a challenging and exciting one and I would recommend anyone interested in science and math to join the academy.

AMPLIFYING A LEARNING EXPERIENCE
BY Ricardo Black Erasmus Hall High
grade 11

This was by far the most intellectual summer I had ever spent in this country before. There were so many new friends to meet and lots of places to go, but the best of all was the things we did indoors.

I had never known the true meaning behind the feeling you get when you finally get something to work that you know that you alone built. This summer in the physics class I learned of such a feeling. It was the second to last week before the summer academy officially closed its doors, at that time Mr. Langan was away and Mr. Hecht took over the class for the following week. He announced that we would be building an amplifier. No one wanted to hear about an amplifier because the days were winding down and no one had started their projects as yet.

The following Monday we started to design our circuits, and soon we were soldering and testing and having a good time. I still wanted to know when I would get to start my science project. I was always going around the room and helping other people with their jobs, but I was the last one to start the amplifier. I tried almost every thing I could think of to make the circuit work, but nothing seemed to be correct. I finally decided that I would add an on/off switch and a light emitting diode(LED) to the circuit to make it look different from all the others. All day long I heard the sound of the black and decker power drills and smelt the odor of the soldering iron, but I was persistent in making my amplifier work. I had just made the last battery connection and before my eyes was the green LED lighting up. I was ecstatic. It really gave me a sense of independence to be able to build, test and display the final product of the amplifier. That day I think my happiness was amplified at least 200 times.

Name : Jenny Cheung
Major : Computer

Newsletter:

I can't begin to tell how wonderful the summer has been at the Brooklyn Summer Academy. From the field trips to the lessons at South Shore, they have all been great.

I have learned so much that it's difficult for me to sum up. Besides the great learning, I have also made many good friends who are all generous and kind. They are truly the best relationships that anyone could ever want. I am so thankful I spent " The Best Summer of My Life " at the Academy. If I was to relive it over again, I wouldn't change my choice to come here.

ANONYMOUS COMMENTS

During the time I spent at the academy I met many people from different schools, cultures and ethnic groups. Working with them I experienced a feel for their customs. I also learned many things such as the scientific way of writing a research paper, handling organisms and doing experiment with organisms. This gave me a more understandable methods for doing my future research.

Here at the academy, I met lots of interesting people. I leared about different techniques and skills that will help me in my future education in the science field. The trip that we went on were fun and learning experiences that I will never forget.

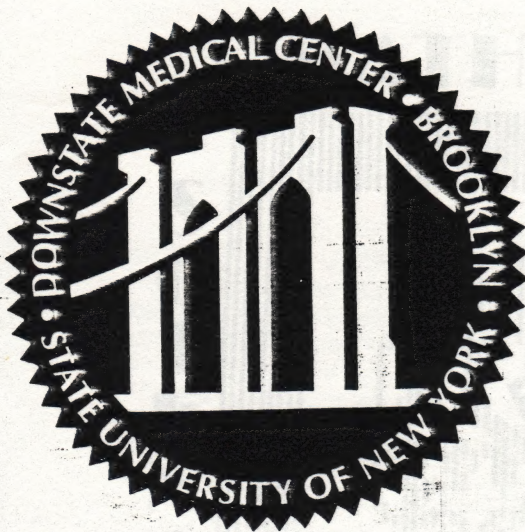
THERE ARE MORE THAN 8 RESTAURANTS AROUND SOUTH SHORE HIGH SCHOOL. THERE ARE CHINESE RESTAURANTS, DINERS, ROY ROGERS, BURGER KING, A COFFEE SHOP AND MORE. IF YOU HAVE 5 BUCKS OR LESS YOU SHOULD GO TO THE COFFEE SHOP. 1/4 LB HAMBURGER, FRENCH FRIES ,PICKLE AND COLE SLAW IS ONLY \$2.99. IF YOU WANT TO GO TO THE DINER, YOU NEED ABOUT 8 DOLLARS. DO YOU KNOW THE MOST EXPENSIVE RESTAURANT AROUND THE SCHOOL? IT'S NOT A DINER OR CHINESE RESTAURANT. IT'S THE RESTAURANT CATERERS ACROSS THE STREET. I PAID 10 DOLLARS FOR A HAMBURGER DELUXE AND CHICKEN RICE SOUP. IF YOU DON'T WANT TO SPEND A LOT AND YOU WANT TO HAVE A NICE LUNCH, GO TO THE SCHOOL'S CAFETERIA.

SUNG YIM

Name: Yolanda Brown
Major: Computer Science

Date: August 17,1988
Teacher: Mr. Farr

The strips that are on the end of the paper are not necessary. I find them all over the place. The student here tear them off and throw them at each other. I even found some in the bathroom. I wonder if they are using them as tissue. People these days don't have the decency to throw them in the waste basket. If they do try to throw them in the waste basket they try to shoot them like they are playing basketball.



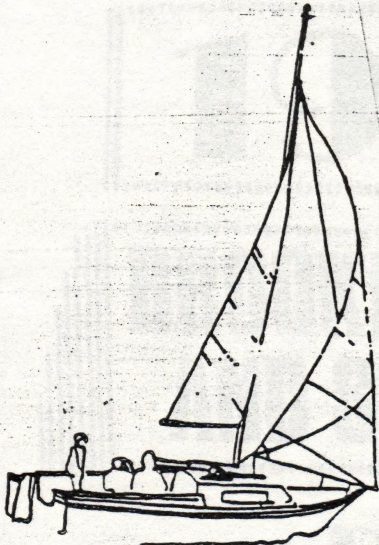
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